

REMARKS

Applicants cancel claim 82 and 90 and amend claims 81 and 88 such that claims 1-34 and 81, 83-89 and 91-95 are pending in this application. Applicants respectfully request allowance of all the pending claims.

Claim Rejections – 35 U.S.C. §102

The Examiner rejects claims 1-34 and 81-95 under 35 U.S.C. §102(b) as being anticipated by French Patent No. 755,348 (“the ‘348 Patent”).

Independent Claims 1 and 20

Claim 1 recites an apparatus for stacking sheets from a starwheel assembly comprising . . . a first separator finger . . . and a second separator finger movable independently of the first separator finger.

Claim 20 recites a method for stacking sheets from a starwheel assembly . . . comprising . . . inserting a first separator finger between two adjacent sheets . . . [and] moving a second separator finger independently of the first separator finger

Claim 1 recites independently movable first and second separator fingers and claim 20 recites independently moving first and second separator fingers. Accordingly, claims 1 and 20 recite independently movable separator fingers. Claims 1 and 20 recite similar subject matter and are therefore discussed together below.

As described on pages 12 and 27 of the Application, the stacking apparatus 10 can include a second separator finger 46 for separating adjacent sheets within the starwheel assembly 14 independent of the first separator finger 38. Preferably, the second separator finger 46 is similarly attached to the frame and is capable of two dimensional movements that are preferably (but not necessarily) the same as the first separator finger 38.

Independent control over multiple separator fingers enables relatively complex movement of the separator fingers relative to one another and relative to stacks of product being built. For example, where two separator fingers operate as described with reference to FIGS. 4-11 and 19-22, one finger can be moved to be inserted between sheets of product in the starwheel(s) while another of the fingers moves in a significantly different manner to permit additional sheets of product to be stacked thereupon. Independent movement and control of the two separation fingers as described above enables such movement.

The '348 Patent appears to disclose a starwheel (1) and first and second sets of separation fingers (4) movable to begin and hold a stack of sheets being discharged from the starwheel (1). The first and second sets of separation fingers (4) appear to be actuated along defined paths by a common cam shaft (15). Each separation finger appears to include a pair of cam followers (11, 12) that interact with respective cam lobes (13, 14). As the cam shaft (15) rotates, the cam lobe (13) appears to contact the cam follower (12) to generally raise and lower the separation finger (4) and the cam lobe (14) appears to contact the cam follower (12) to pivot the separation finger (4).

The '348 Patent does not teach or suggest independently movable separator fingers. Instead, the '348 Patent appears to disclose first and second fingers (4) whose movement along defined paths is dependent upon the rotation of a common cam shaft (15). As the cam shaft (15) rotates, the cam lobe (13) appears to contact the cam follower (12) to generally raise and lower the separation finger (4) and the cam lobe (14) appears to contact the cam follower (12) to pivot the separation finger (4). Therefore, the movement and position of one finger (4) is dependent upon and can be determined by the movement and position of the other finger (4). The '348 Patent does not teach or suggest one separator finger (4) being independently moveable regardless of the movement and position of the other finger (4).

Accordingly, independent claims 1 and 20 are allowable. Claims 2-19 and 20-34 depend from allowable independent claims 1 and 20, respectively, and are allowable for the same and other reasons.

Independent Claims 81 and 88

Claim 81 recites a sheet stacking apparatus for stacking sheets from a starwheel assembly . . . comprising: a separator finger; a first actuator coupled to the separator finger, the first actuator actuatable to move the separator finger in a first direction; and a second actuator coupled to the separator finger, the second actuator actuatable to move the separator finger in a second direction . . . wherein the first and second actuators are independently controllable.

Claim 88 recites a method of stacking sheets of product discharged from a starwheel . . . comprising: actuating a first actuator coupled to a separator finger . . . actuating a second actuator coupled to the separator finger . . . wherein the first actuator is actuated independently of the second actuator.

Claim 81 recites first and second independently controllable actuators to move a separator finger first and second directions, respectively. Claim 88 recites first and second independently actuatable actuators to move a separator finger first and second directions, respectively. Accordingly, claims 81 and 88 recite independently controllable or actuatable separator finger actuators. Claims 81 and 88 recite similar subject matter and are therefore discussed together below.

As described on pages 10 and 11 of the Application, the separator finger can be connected to first and second actuators so that the separator finger can be movable through a range of positions in a plane. The range of positions can be defined by the ranges of movement of the first and second actuators and/or by the limitations of movement placed upon these actuators by conventional controller coupled thereto. One having ordinary skill in the art will appreciate that by controlling the first and second actuators, the separator finger can preferably be placed in any position in the aforementioned plane and can preferably be moved through any desired path in the plane. In some preferred embodiments, the separator finger is movable through a quadrangular path by actuation of the first and second actuators. In other embodiments, the separator finger is movable through a closed path defining a triangular or other polygonal shape, an ellipse, circle, oval, or other curved path (including unusually shaped or complex curved paths), a path having any combination of straight and curved portions, and the like. Also, the separator finger can be moved by actuating either the first or second actuators in a series of actuations, by actuating the first and second actuators at the same time or at substantially the same time, or by actuating either or both of these actuators as needed to generate the desired direction and path of finger movement.

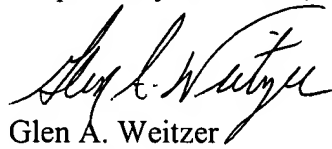
The '348 Patent does not teach or suggest independently controllable or actuatable separator finger actuators. Rather, the '348 Patent appears to disclose separator finger actuators (i.e., cam lobes (13, 14)) that are fixed to and rotated on a common cam shaft (15). As the cam shaft (15) rotates, the cam lobe (13) appears to contact the cam follower (12) to generally raise and lower the separation finger (4) and the cam lobe (14) appears to contacts the cam follower (12) to pivot the separation finger (4). Because the cam lobes (13, 14) are rotated on a common shaft (15), the cam lobes (13, 14) cannot be rotated, controlled, or actuated in any way independently from each other. Therefore, the movement and position of one cam lobe (13) is dependent upon and can be determined by the movement and position of the other cam lobe (14).

The '348 Patent does not teach or suggest one separator finger (4) being independently moveable regardless of the movement and position of the other finger (4).

Accordingly, independent claims 81 and 88 are allowable. Claims 83-87 and claims 89 and 91-95 depend from allowable independent claims 81 and 88, respectively, and are allowable for the same and other reasons.

The Examiner is invited to contact the undersigned attorney should the Examiner determine that such action would facilitate the prosecution and allowance of the present application.

Respectfully submitted,



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